What is claimed is:

1. A method for evaluating a carbohydrate in a sample, the method comprising:

(a) contacting a recombinant reduced valency carbohydrate binding ligand (CBL) with

(i) a carbohydrate in the sample and

(ii) a glycoconjugate that includes the carbohydrate; and

(b) determining the extent to which the recombinant reduced valency CBL binds the glycoconjugate, the extent of the binding being correlated with the amount of the carbohydrate in the sample.

2. The method of claim 1, wherein the recombinant reduced valency CBL is a recombinant monomeric form of a multimeric protein.

3. The method of claim 1, wherein the recombinant reduced valency CBL is a lectin.

4. The method of claim 3, wherein the lectin is Concanavalin A.

5. The method of claim 4, wherein the Concanavalin A is mutagenized at residues important in dimer-dimer interactions to produce dimers which do not assemble into tetramers.

6. The method of claim 5, wherein the Concanavalin A contains a mutation at one or more of the following amino acid positions: 87-90, 136-139, and 175-178.

7. The method of claim 1, wherein at least one of the recombinant reduced valency CBL and the glycoconjugate include a detectable label.

8. The method of claim 7, wherein the label is a radioactive label, a fluorescent label, an enzyme, a proximity-based signal generating label moiety, a homogeneous time resolved fluorescence (HTRF) component, a luminescent oxygen channeling assay (LOCI) component, biotin, avidin, or an antibody or a portion thereof.

9. The method of claim 8, wherein the proximity-based signal generating label moiety is a fluorescence resonance energy transfer (FRET) component.

10. The method of claim 1, wherein the sample is a sample of urine, blood, plasma, saliva, intracellular fluid, interstitial fluid, homogenized cells, or a cell extract.

11. The method of claim 1, wherein the carbohydrate is a monosaccharide, a disaccharide, or a polysaccharide.

12. The method of claim 1, wherein the carbohydrate is glucose.

13. The method of claim 1, wherein the carbohydrate is a component of a glycoprotein.

14. The method of claim 1, wherein the glycoconjugate comprises serum albumin.

15. A method for evaluating a carbohydrate in a sample, the method comprising:

(a) contacting the sample with a specific binding pair comprising a first binding member and a second binding member, the first binding member comprising a recombinant reduced valency CBL coupled to a first energy absorbing FRET component, and the second binding member comprising a glycoconjugate that includes a carbohydrate and a second energy absorbing FRET component; and

(b) evaluating the extent to which non-radiative fluorescence resonance energy is transferred between the first energy absorbing FRET component and the second energy absorbing FRET component, the extent of the transfer being correlated with the amount of the carbohydrate in the sample.

16. The method of claim 15, wherein the excited state energy levels of the first and second energy absorbing FRET components overlap.

17. The method of claim 15, wherein the recombinant reduced valency CBL and the glycoconjugate reversibly bind to each other.

18. A method for evaluating a carbohydrate in a patient, the method comprising:

(a) contacting the patient with a sensor comprising a first binding member and a second binding member, the first binding member comprising a recombinant reduced valency carbohydrate binding ligand (CBL) coupled to a first energy absorbing FRET component, and the second binding member comprising a glycoconjugate comprising a carbohydrate and a second energy absorbing FRET component; and

(b) evaluating the extent to which non-radiative fluorescence energy is transferred between the first and second energy absorbing FRET components.

19. The method of claim 18, wherein contacting the patient with a sensor comprises introducing the sensor into an organ or blood vessel within the patient.

20. The method of claim 18, wherein contacting the patient with a sensor comprises applying the sensor to the patient's skin.

21. The method of claim 18, wherein the excited state energy levels of the first and second energy absorbing FRET components overlap.

22. The method of claim 18, wherein the recombinant reduced valency CBL and the glycoconjugate reversibly bind one another.

23. A sensor for evaluating a carbohydrate in a subject, the sensor comprising a specific binding pair comprising a first binding member and a second binding member, the first binding member including a recombinant reduced valency CBL coupled to a first energy absorbing FRET component, and the second binding member including a glycoconjugate that includes a carbohydrate and a second energy absorbing FRET component.

24. The sensor of claim 23, further comprising a solid support to which the specific binding pair is bound.